TABLE 2—Financial Summary, not including labor costs.

	Lot 1.	Lot 2.
Cost of pigs	$ 100.00	$ 100.00
Cost of grain	87.46	103.59
Cost of protein supplement	41.60	43.59
Miscellaneous costs, Vaccination, etc.	20.15	20.15
Total costs	249.21	267.33
Returns from sale of pigs	273.04	272.56
Net above cost	23.83	5.23

The pigs cost $10.00 a head. Prices charged for feed are: Corn $1.12 a bushel, barley $.96 a bushel, wheat $1.06 a bushel (CCC price) protein supplement $90.00 a ton.

SUMMARY

A mixture of shelled corn and barley, equal parts by weight was equivalent to wheat as feed for growing fattening pigs, when supplemented with protein.

Gains were nearly equal in the two lots; 1.48 pounds daily and 1.50 pounds daily in the wheat lot and corn-barley lot, respectively.

Amounts of feed required to produce 100 pounds gain were almost the same in the two lots and were quite low; 333 pounds and 342 pounds in Lot 1 and Lot 2, respectively.

This trial demonstrates the fact that average pigs will make rapid and economical gains when properly managed and fed a well balanced feed. It also demonstrates the fact that wheat is an excellent feed for hogs, at least equal to the usual feed grains, corn and barley.

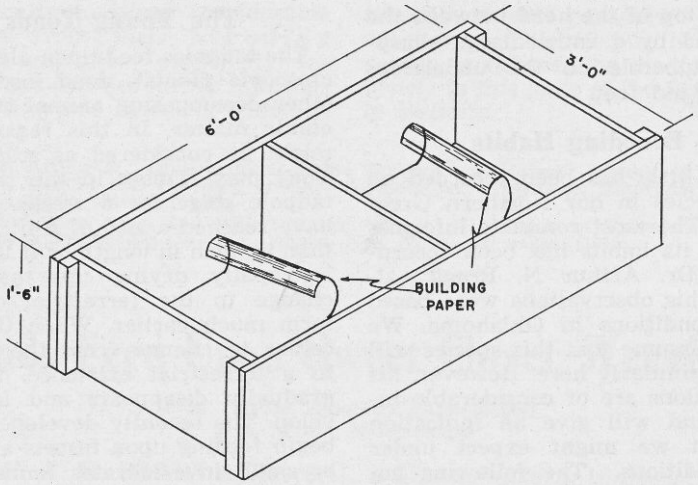
Will Building Paper on The Floor of A Granary Impart An Odor to The Grain

THOMAS E. LONG
Assistant Agricultural Engineer

DURING the harvest season, there has been occasion for some farmers to place some type of building paper on the floor of the permanent or temporary storage for the small grain crop. There have been some reports that this grain was declared unfit for human consumption because of odors after it had been in storage for some time.

TESTS MADE

Between November 25, 1942 and October 13, 1943 one lot of wheat was stored on six different kinds of surfaces. Boxes as shown in the sketch were made and building paper placed on the floor and filled with wheat of 12.5 percent moisture content. Each trial with building paper was repeated three times. One sample was taken from the floor and one sample 6 inches above the floor from each compartment.



Installation of Building Paper in Test Boxes

Each sample was judged by the federal grain supervisor and a member of the cereal technology department.

Building Paper Used:

Tar paper, 15 pound Asphalt Felt, Black Jack, Black Shield and Sisalkraft were the building papers used on the floors of these boxes. Wheat was stored on a plain wood surface in one group of boxes.

Results:

All of the samples taken from the floor and 6 inches above the floor were found to show no sign of odor that would classify them objectionable on the market.

Appreciation is extended to M. J. Johnson, Grain Supervisor, Food Distribution Administration, and L. D. Sibbitt, Cereal Technology Department, for assistance in grading the samples.

Habits of Our Toads

H. S. TELFORD
Associate Entomologist

THE abundance of toads has caused an unusual amount of local interest during the last 3 years. It has not been uncommon to observe on damp or rainy days thousands of small toads hopping on highways, in gardens and fields in search of food. The question is often asked, "Where do they all come from so soon after rain?" It would seem that these creatures literally rained down from the heavens. The fact is they are always with us, and it is only when favorable temperature and moisture conditions prevail that they are normally observed.

While several kinds of toads occur in North Dakota, the great plains toad, *Bufo cognatus* Say, is by far the most abundant, and this discussion will deal principally with this form. The American toad, *B. americus* Holbrook, and the Manitoba toad *B. hemiophrys* Cope, are less frequently observed. The central plains spadefoot, *Scaphiopus hammondi bombifrons* (Cope), may also occur here. The great plains toad can be recognized from our other species by a triangular bony eleva-